

Remarks

I. The Amendments

The specification of the application was amended to arrange sequence identification numbers. Attached hereto as an Appendix is a marked-up version of the text showing the changes that were made. It can be seen that, except for the sequence identification numbers, the original text has not been altered.

II. Submission of Computer Readable Form of Sequence Listing

Enclosed herewith is a 3.5 inch computer diskette containing a copy of the enclosed Sequence Listing in ASCII text.

III. Statements to Comply With Sequence Listing Rules

In compliance with 37 C.F.R. § 1.821(f), Applicants' undersigned attorney hereby states the content of the paper and computer readable copies of the Sequence Listing submitted herewith are the same. In accordance with 37 C.F.R. § 1.821(g), Applicants' undersigned attorney hereby states that the Sequence Listing submitted herewith does not add new matter to the application.

Conclusion

In light of the amendments and remarks above, Applicants submit that they have now fully complied with all Sequence Listing rules. It is therefore respectfully submitted that this application is now in condition for substantive review. If, in the opinion of the Examiner, a phone call may help to expedite the prosecution of this application, the Examiner is invited to call Applicants' undersigned attorney at (703) 905-2251.

Respectfully submitted,
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Appendix

Version with Markings to Show Changes Made

The specification has been amended herein to add sequence identification numbers. The changes that were made are shown below with the underlined words indicating text that was added.

On page 4, lines 28-35 to read as follows:

In particular, the invention relates to the medical, pharmaceutical and cosmetic uses of trypsines derived from Atlantic cod or other animals. There are three isoenzymes of trypsin in Atlantic cod that have been purified and characterized. They have been termed Trypsin I, II, and III (Asgeirsson et al., Eur. J. Biochem. 180:85-94, 1989). The cod trypsins have the amino terminal sequence (SEQ ID NO:1) I-V-G-G-Y-Q/E-C-E/T-K/R-H-S-Q-A-H-QV-S-L-N-S while mammalian trypsins such as bovine trypsin have the amino terminal sequence (SEQ ID NO:2) I-V-G-G-Y-T-C-G-A-N-T-V-P-Y-Q-V-S-L-N-S. All three isoforms of cod trypsin have a similar molecular mass of about 24 kDa.

On page 5, lines 1-11 to read as follows:

The invention also relates to the medical, pharmaceutical and cosmetic uses of chymotrypsins derived from Atlantic cod or other animals. There are two major isoenzymes of chymotrypsin in Atlantic cod that have been purified and characterized. They have been designated Chymotrypsin A and B (Asgeirsson and Bjarnason., Comp. Biochem. Physiol. 99B:327-335-94, 1992). The cod chymotrypsins have the dual amino terminal sequences of one of its active forms C-G-R/S-P-A-I-S/Q-P-V/Q-I/V-T-G-Y (SEQ ID NO:3)

(A chain) and I-V-N-G-E-E-A-V-P-H-S/T-W-S/P/Y-W-Q-V-S-LQ-D/Q (SEQ ID NO:4) (B chain) whereas mammalian chymotrypsins such as bovine chymotrypsin A have the amino terminal sequences C-G-V-P-A-I-Q-P-V-L-S-G-L (SEQ ID NO:5) (A chain) and I-V-N-G-E-E-A-V-P-G-S-W-P-W-Q-V-S-L-Q-D (SEQ ID NO:6) (B chain). Both isoforms of cod chymotrypsin have a similar molecular mass of about 26 kDa.

On page 5, lines 24-30 to read as follows:

The preferred method of application of the purified enzymes or mixture of purified enzymes 25 is in a preparation of hydrogel and water containing 0 to 85% (vol/vol) of a polyvalent alcohol (polyol) such as glycerol. A suitable concentration of trypsin activity is 0.1 to 10,000 enzyme units of activity for CBZ-Gly-Pro-Arg-pNA (carbobenzoxy Gly-Pro-Arg-para nitroanalide) per 100 milliliters of the final hydrogel preparation and the appropriate concentration of chymotrypsin activity is 0.1 to 10,000 enzyme units of activity for Succinyl-Ala-Ala-Pro-Phe pNA (SEQ ID NO:7) per 100 milliliters of the final hydrogel preparation.

On page 12, lines 21-24 to read as follows:

The molecular mass of the cod trypsins is about 24 kDa, whereas their isoelectric points are 6.6, 6.2 and 5.5 for trypsin I, II and III respectively. The amino acid sequences of the three isozymes of cod trypsin can be expressed with the following sequence, (SEQ ID NO:8) which contains point variability due to the multiple isoforms: